

Part One

INTRODUCTION TO THE CENTRAL PRODUCT CLASSIFICATION

I. HISTORICAL BACKGROUND

1. The need for the development of the Central Product Classification originated from initiatives in the early 1970s to harmonize international classifications, in which a standard classification of all products was perceived as a key element. At the seventeenth session of the Statistical Commission in 1972,¹ the twenty-first session of the Conference of European Statisticians in 1973 and meetings of members of both bodies with the secretariats of international organizations, there was general agreement on the need to improve harmonization among the various classifications in the economic and other fields that had been prepared under the auspices of the United Nations and other international bodies.

2. With regard to the preconditions of creating a comprehensive classification of all goods and services, an important development took place in the 1970's. The Customs Cooperation Council (CCC) undertook the revision of its nomenclature (CCCN) and its extension from a four-digit system to a six-digit system. As a result, a new nomenclature, called the Harmonized Commodity Description and Coding System (HS) was adopted in 1983 and entered into force on 1 January 1988.² The Statistical Office of the United Nations Secretariat participated in the development of the HS, mainly in order to ensure that the applied dissections of the HS would take into account, as much as possible, continuity with the Standard International Trade Classification (SITC)³ of the United Nations, and the industrial origin of the goods.

3. Based on the recommendations of an Expert Group convened by the United Nations Secretariat, the Statistical Commission at its nineteenth session in 1976⁴ approved a programme to harmonize the existing activity classifications of the United Nations, the European Communities and the Council for Mutual Economic Assistance (CMEA) and to simultaneously develop a system of different, but interrelated, classifications of economic activities and goods and services. Development of a new classification covering both goods and services (products) - the Central Product Classification (CPC) - was intended to provide a basic tool in this programme. The proposed product classification was to use the detailed subheadings of the HS as building blocks for the part dealing with transportable goods and to take into account the basic categories of economic supply and use as specified in the System of National Accounts (SNA), such as intermediate consumption, final consumption, capital formation and imports and exports.⁵ The Statistical Commission endorsed the programme and supported its continuation at subsequent sessions with the provision that existing systems maintain their essential character.⁶

¹ Official Records of the Economic and Social Council, 1972, Supplement No.2 (E/5236), para. 104.

² Harmonized Commodity Description and Coding System, Customs Cooperation Council (Brussels, 1983).

³ Standard International Trade Classification, Rev.3, Statistical Papers, Series/M, No./34, Rev.3 (United Nations publication, Sales No./E.86.XVII.12).

⁴ Official Records of the Economic and Social Council, 1976, Supplement No./2 (E/5910), para. 128/(c).

⁵ A System of National Accounts, Studies and Methods, Series F, No/2, Rev.3 (United Nations publication, Sales No. E.69.XVII.3).

⁶ Official Records of the Economic and Social Council, 1981, Supplement No./2 (E/1981/12), para. 87; *ibid.*, Supplement No./2 (E/1983/12), para./75/(a); *ibid.*, Supplement No. 6 (E/1985/26), paras. 45 and 57/(a); *ibid.*, Supplement No. 6 (E/1987/19), para. /75/(a).

4. During the period 1977-1987 the Statistical Office of the United Nations Secretariat and the Statistical Office of the European Communities (EUROSTAT) convened six meetings of the Joint Working Group on World Level Classifications with the purpose of developing an Integrated System of Classifications of Activities and Products (SINAP) to serve as an interim classification. It was intended that categories of SINAP be used as building blocks for the revision of the International Standard Industrial Classification of All Economic Activities (ISIC) Revision 2,⁷ the General Industrial Classification of Economic Activities within the European Communities (NACE),⁸ and for related classifications of goods and services. The joint Working Group also contributed proposals on the relationship between SITC and CPC.

5. During the period 1983-1988 the Statistical Office of the United Nations Secretariat organized a series of related Expert Group meetings dealing with economic classifications. In the Expert Group countries from different parts of the world and at various stages of development were represented, as well as regional commissions and international organizations. The main task of the meetings was to review the drafts of ISIC Rev.3 and the CPC under development by the Statistical Office.⁹

6. The first complete draft of the CPC was reviewed by the Statistical Commission at its twenty-fourth session in 1987.¹⁰ At the Commission's recommendation, work on the CPC continued in conjunction with international organizations, in particular EUROSTAT and the Organisation for Economic Cooperation and Development (OECD). The development of service classifications and related explanatory notes for service products was the main agenda item at the early meetings of the Voorburg Group on Service Statistics.¹¹ In 1987 and 1988 the Joint Working Group on World Level Classifications and a United Nations Expert Group meeting reviewed subsequent drafts of the CPC. The Expert Group on Harmonization of Economic Classifications recommended that the acronym CPC for Central Product Classification be included in the title, regardless of language, to facilitate international recognition when referring to the classification.¹²

7. The Statistical Commission at its twenty-fifth session considered the final draft in 1989 and approved to be published as a provisional document.¹³ The Commission recommended that Member States start testing the Provisional CPC in order to gain experience in obtaining internationally comparable data on goods and services.

8. The Provisional Central Product Classification was published by the United Nations in 1991.¹⁴ The experience of national and international users provided a sound basis for its

⁷ International Standard Industrial Classification of All Economic Activities, Statistical Papers, Series/M, No./4, Rev.2 (United Nations publication, Sales No. E.68.XVII.8).

⁸ Statistical Office of the European Communities (Luxembourg, 1970).

⁹ For reports of the Expert Group Meeting, see documents ESA/STAT/AC.19/10, ESA/STAT/AC.25/10 and ESA/STAT/AC.32/9, respectively.

¹⁰ Official Records of the Economic and Social Council, 1987, Supplement No. (E/1987/).

¹¹ Provisional Central Product Classification, Statistical Papers, Series/M, No 77 (United Nations publication, Sales No. E.91.XVII.7), pages VI - vii.

¹² See note 9.

¹³ Official Records of the Economic and Social Council, 1989, Supplement No. 3 (E/1989/21), para./95/(b) and (f).

¹⁴ Provisional Central Product Classification, Statistical Papers, Series/M, No 77 (United Nations publication, Sales No. E.91.XVII.7).

subsequent revision. The revision of the Provisional CPC has also taken into account the promotion of harmonization of economic classifications of the European Union and, whenever possible, those of the Council for Mutual Economic Assistance with United Nations international economic classifications. Through the United Nations Statistical Office of the European Communities Joint Working Group and the cooperation of all parties concerned, it was agreed that the revised NACE and related product classifications of the European Union would incorporate both ISIC and CPC in their structure and content. The Classification of Products by Activity (CPA) is based on NACE and has links to the CPC at its detailed level.¹⁵ PRODCOM - the List of industrial products of Eurostat can also be linked to the CPC via its HS links.

9. Details on the revision process leading to the completion of the Central Product Classification (CPC) Version 1.0 are included in the Preface.

II. UNDERLYING PRINCIPLES OF THE CLASSIFICATION

A. Purpose and nature of the classification

10. The main purposes of CPC are to provide a framework for international comparison of statistics dealing with goods, services and assets and to serve as a guide for developing or revising existing classification schemes of products in order to make them compatible with international standards. It was developed primarily to enhance harmonization among various fields of economic and related statistics and to strengthen the role of national accounts as an instrument for coordination of economic statistics. It provides a basis for recompiling basic statistics from their original classifications into a standard classification for analytical use.

11. The CPC constitutes a comprehensive classification of all goods and services. With regard to services, no international classification covering the whole spectrum of outputs of the various service industries and serving the different analytical needs of statistical and other users has been available before the development of CPC. As a general-purpose classification, CPC provides less detail than other specific classification systems in areas or applications for which such systems are available, for example the HS for international commodity trade statistics.

12. The CPC includes categories for all products that can be the object of domestic or international transactions or that can be entered into stocks. It presents products that are an output of economic activity, including transportable goods, non-transportable goods and services. It also includes certain non-produced assets, such as land and legal instruments providing ownership over intangible assets, such as patents, licenses, trademarks and copyrights. Although such non-produced assets are not regarded as products in the System of National Accounts (SNA), they are included in the balance sheet.¹⁶ There is substantial national and international trade in land, intangible assets and related services, and demand exists for such data. It was therefore considered useful to include them in the CPC. While the CPC covers selected assets, it did not intend to include a comprehensive list of assets, that would

¹⁵ Council Regulation No. 3696/93 of October 1993 on the statistical classification of products by activity (CPA) in the European Economic Community.

¹⁶ System of National Accounts 1993, Series F, No. 2, Rev. 4, (United Nations publication, Sales No. E.94.XVII.4), Chapter 13, Annex, Definition of Assets.

consist of land, constructions, machinery and equipment, and various other categories of assets, tangible and intangible, financial and non-financial, produced and non-produced, as described by the SNA 1993.¹⁷

13. The CPC, as a standard central product classification, was developed to serve as an instrument for assembling and tabulating all kinds of statistics requiring product detail. Such statistics may cover production, intermediate and final consumption, capital formation, foreign trade or prices. They may refer to commodity flows, stocks or balances and may be compiled in the context of input-output tables, balance-of-payments and other analytical presentations.

14. It is hoped that, in the long run, CPC will contribute to a reduction of the number of product classifications used internationally. As a general-purpose product classification, it serves as a guideline for future product-type classifications for specific areas of the economy. Such specific classifications should be compatible with the general framework of the CPC so as to ensure comparability of data.

B. Principles used in constructing CPC

15. The CPC, covering all goods and services as well as certain types of assets, is a system of categories that are both exhaustive and mutually exclusive. This means, if a product does not fit into a CPC category, it must automatically fit into another category. Consistent with the other principles used, homogeneity within categories is maximized. The CPC classifies products into categories based on the physical properties and the intrinsic nature of the products as well as the principle of industrial origin.

16. In constructing the CPC, subclasses in Sections 0-4 are defined as the equivalents of one, or the aggregations of several headings or subheadings of the Harmonized Commodity Description and Coding System (HS), a classification of the World Customs Organization.¹⁸ The HS itself uses primarily the physical property criterion for classifying goods. With the HS in use in many countries for international trade statistics and, in some countries for production statistics, the introduction of CPC in those countries is thereby facilitated.

17. The physical properties and intrinsic nature of products are distinguishing characteristics that are proper to the products themselves. These include, for example, the raw materials of which goods are made, the stage of production or the way in which goods are produced or services are rendered, the purpose or user category for which products are intended, and the prices at which they are sold.

18. The importance of the industrial origin of goods and services was recognized by the attempt to group into one CPC subclass mainly the products that are the output of a single industry. Through their linkage to the industrial origin criteria, the input structure, technology and organization of production characteristics of products are also reflected in the structure of the CPC. The industrial origin of products criterion is one of the classification principles applied by

¹⁷ System of National Accounts 1993, Series F, No. 2, Rev. 4, (United Nations publication, Sales No. E.94.XVII.4), (Annex V, Part 1, D).

¹⁸ Harmonized Commodity Description and Coding System, 1996 edition, Catalog No. 101, World Customs Organization, Brussels, 1996.

another United Nations classification, the International Standard Industrial Classification of All Economic Activities (ISIC).

19. In the construction of CPC, both criteria, i.e. the nature of the product and the industry of origin, were taken into account. However, practical difficulties had to be resolved. Some industries produce goods of very different nature. For example, meat and hides are both produced by slaughterhouses. These products are not put together in one category or even in the same section of the CPC. Since unprocessed hides are considered raw animal materials, they are classified in Section 0 (Agriculture, forestry and fishery products), whereas meat is classified in Section 2 among food products.

20. In some cases, goods with different industrial origin are included in a single CPC category, particularly, where the HS does not follow the industrial origin criterion. For instance, rarely does the HS distinguish between metal products of cast iron and other metal products. Moreover, many products made by casting are classified in the HS as parts of machinery or other goods. As a result, the CPC does not have a separate category with cast iron products, and therefore no reference is made to ISIC group 273 (Casting of metals).

21. Similar problems concerning industrial origin arise when industries produce both goods and services. Examples of such services are repair, maintenance and manufacturing on a fee or contract basis. Although the industrial origin of these services is often the same as the origin of the goods themselves, it should be clear that the nature of the services involved may be markedly different from that of the goods, so that the goods and services should be classified under different parts of the CPC. Therefore, "Production services on a fee or contract basis", presented in Division 86 of the classification, are distinguished from manufactured goods classified in Sections 2-4 of the CPC.

C. Goods and services in CPC

22. Among the variety of criteria generally used for distinguishing between goods and services (tangible versus intangible, storable versus non-storable or transportable versus non-transportable), none provides a valid, practical and unambiguous distinction of goods from services in all cases. While the product content of most CPC subclasses can be identified as being goods or services, in some cases this cannot be easily resolved. Examples of borderline cases are photographs, computer tapes and meals or drinks in restaurants. In these cases, as well as others, a bundle, i.e. a combination or mixture of products is sold and, more often than not, this bundle consists of both goods and services components. In the case of meals or drinks consumed in a restaurant, for example, the food and beverages consumed would be goods, the cooking and serving components are services, as are the seating and the locality of the restaurant, constituting an intangible component. The purchaser of such a "mixed product" usually does not give much thought to whether a good or a service is purchased. The customer in a bookshop wants to buy a good and is probably not aware of the individual services provided by the author, the publisher, and the retail salesperson. On the other hand, the person who has a pair of shoes resoled probably regards the transaction as a purchase of a service and does not think of the pieces of repair material involved. In the case of a restaurant meal, the situation is even more ambiguous and varied with respect to the goods portion of the transaction compared to the service portion.

23. Although precise distinction between goods and services may be interesting from a theoretical point of view and may even be relevant for the compilation and analysis of certain economic statistics, there is no need to embody such a distinction into a classification of products such as the CPC. The CPC was developed to classify everything that can be the object of a transaction, covering goods and services (products), certain produced assets and even non-produced assets such as land.

D. Goods and services in SNA

24. The 1993 SNA provides a definition of products, saying that goods and services, also called products, are the result of production.¹⁹ They are exchanged and used for various purposes: as inputs in the production of other goods and services, as final consumption or for gross capital formation. It concludes that the term product is a synonym for goods and services. It also states that in order to study transactions in goods and services in detail, the System uses the Central Product Classification (CPC). Further, the production boundary of the SNA excludes the provision of services by households for own final consumption within the same household. These SNA definitions are essentially those embodied in the characteristics of CPC categories.

25. For international trade statistics, the 1993 SNA also encompasses the concepts of goods and services, rather than the concepts of merchandise and non-merchandise trade as described in the previous SNA. This further enhances the conceptual integrity of the CPC.

E. Coding system of the classification

26. The coding system of the CPC is hierarchical and purely decimal. The classification consists of sections (identified by the first digit), divisions (identified by the first and second digits), groups (identified by the first three digits), classes (identified by the first four digits) and subclasses (identified by all five digits, taken together). The codes for the sections range from 0 through 9 and each section may be divided into nine divisions. At the third digit of the code each division may, in turn, be divided into nine groups which then may be further divided into nine classes and then again into nine subclasses. In theory, this allows for 65,610 categories. In practice, however, there are 10 sections, 71 divisions, 294 groups, 1,162 classes and 2,093 subclasses. The code numbers in CPC consist of five digits without separation of any kind between digits. This coding system was chosen to avoid possible confusion with code numbers of another United Nations Classification, the Standard International Trade Classification (SITC) which also have five digits but use a point to the right of the third digit.

27. Where a given level of classification is not further subdivided, a "0" is used in the position for the next more detailed level. For example, the code for the Subclass "Clays" is 15400, since Group 154 "Clays" is not divided into classes nor subclasses. Similarly, the Subclass "Bituminous or oil shale and tar sands" is coded 12030, as Division 12 "Crude petroleum and natural gas" is not divided into groups but directly into classes, of which Class 1203 "Bituminous or oil shale and tar sands" is not further subdivided.

¹⁹ System of National Accounts 1993, Series F, No. 2, Rev. 4, (United Nations publication, Sales No. E.94.XVII.4), para. 2.30

28. For computerized applications the "0" can also indicate that the code is used for a total of all, more detailed, categories. Thus, the code 2610 could indicate the total of all categories 2611 through 2619, while 34600 could represent the total of all categories 34611 through 34620. Whenever possible, the "9" is reserved to designate residual categories. For example, Class 0119 "Other cereals" contains all cereals not elsewhere classified in Group 011 "Cereals". However, the described approach does not apply to every case when "9" is used in a code.

III. APPLICATION OF THE CLASSIFICATION

A. Use of different levels of the classification

29. Different uses and types of statistics are best served by presenting statistics in terms of different levels of aggregation. Thus, it may be necessary or desirable to use different levels of detail of the CPC for different purposes. For example, it may be necessary to classify data at different levels of detail for purposes of national accounting or for industrial statistics purposes. Similarly, data on production obtained from establishments can usually be classified in far more detail than data on capital formation obtained from administrative reporting systems. The hierarchical structure of the CPC provides a framework for comparable classifications of data at differing levels of detail.

B. Using CPC in establishing national classifications of products

30. Many countries that do not have the experience or resources to develop their own national product classifications, or that want their national product classifications to be related to relevant international classifications as closely as possible, may choose to use the CPC as their national classification. In such cases CPC may be used as is. It may also be expanded or contracted, depending on the needs and possibilities of each country.

31. For a national product classification to be compatible with the CPC, the most detailed categories of classification in the national scheme should coincide with, or be aggregations or dissections of the individual subclasses of the CPC. In other words, each of the most detailed categories of the national product classification should either have the same scope as a CPC subclass, or be dissections of a CPC subclass, or be composed of two or more CPC subclasses, preferably from the same CPC class and group. The first two options are the preferred methods, as they provide the maximum opportunity for correspondence at the detailed level, while the third option allows for correspondence at a more aggregated level of the CPC. Provided these requirements are met, the compatibility of national product classifications with the CPC would not necessarily be affected by their structure or the position of the categories at their most detailed level.

32. It is preferable that additional subdivisions of expanded classifications be part of the same class of the international classification. If so desired, classifications based on the CPC may be constructed by subdividing each subclass into as many as nine subcategories. This

may be done by appending one decimal place to the CPC five-digit code. Alternatively, the subdivision of classes into subclasses in the CPC may, in some cases, be expanded by replacing the subclasses with a greater number of more detailed categories. Where this approach is employed, the more detailed subclasses may be identified by means of five digits, provided no more than nine subclasses are required for each class of the CPC. To preserve comparability with the subclasses of the CPC, the more detailed subcategories should be so delineated that they can be aggregated back to CPC subclasses.

33. Some countries may need to reduce the level of CPC detail in their national classifications. Some CPC categories may well be relatively unimportant in certain countries while other data concerning other CPC categories may simply be unavailable. For example, some countries may not find it practical to establish categories in their national classifications similar to the individual categories of Divisions 43 through 46 (Machinery). They may find it more appropriate to combine some, or all, of the subclasses or classes in each of these divisions into single categories at the most detailed level of their classification. In so doing, one should take into account the principles described above in paragraph 30.

C. Support to users of CPC

34. The United Nations Statistics Division (UNSD) is the responsible agency concerned with the development and maintenance of the Central Product Classification. The developers of national product classifications and other institutions using the CPC for their various purposes may find it in their interest to establish contact with UNSD. This way, users of the CPC may receive notification about plans for updates or revisions of the classification, information about interpretations and rulings concerning the CPC and, in general, technical support for the application of this international standard. Users are encouraged to bring to UNSD's attention the difficulties they may encounter in the implementation of CPC, request clarification and share their experience and remarks on the adequacy of this classification, as well as provide ideas or proposals for enhancing its usefulness. It is hoped that better awareness of the scope and needs of CPC users may facilitate the improvement of the classification of products. Communications may be sent to the Director of the Statistics Division; Attention: Statistical Classifications Section by mail (Address: 2 UN Plaza, Room DC2-1420 New York, NY 10017 USA Fax: 1-212-963-1374) or through the Classification Hotline by email: chl@un.org

IV. RELATIONSHIP OF CPC TO OTHER CLASSIFICATIONS

A. Relationship to ISIC

35. CPC and the International Standard Industrial Classification of All Economic Activities (ISIC) are both general-purpose classifications, with ISIC representing the activity side of these two interrelated United Nations classifications. Each subclass of the CPC consists of goods or services that are predominantly produced in a specific class or classes of ISIC Rev.3.²⁰ With a

²⁰ International Standard Industrial Classification of All Economic Activities, Statistical Papers, Series/M, No./4, Rev.3 (United Nations publication, Sales No. E.90.XVII.11).

view to accommodating users of the CPC wishing to identify the relationship between CPC and ISIC, each CPC subclass has a reference to the ISIC Rev.3 industry or industries in which most of the goods or services in question are generally produced. The predominant ISIC class is shown by listing the corresponding four-digit ISIC Rev.3 codes next to the relevant CPC subclass in the tables presenting the detailed structure of CPC. This information on correspondences between CPC and ISIC Rev.3 categories is included in Part Three of this publication. By rearranging the CPC subclasses according to their ISIC references one can find the main goods or services that are outputs of certain industries.

36. It should be noted, however, that there is no intention to establish one-to-one correspondence between CPC and ISIC. Such effort is not considered practical or desirable as it might lead to inadequate description of CPC categories, especially at the higher levels and it would also make harmonization with the SITC difficult. The relationship between industries and their products is a complex one and changing. Furthermore, the CPC is meant to be used in various kinds of statistics and should not be regarded as a mere extension of ISIC, as it is not limited to listing goods and services produced according to ISIC industries.

B. Relationship to HS and SITC

37. With regard to transportable goods, a very close relationship exists between the CPC and the Harmonized System (HS), as CPC subclasses in Sections 0-4 constitute groupings and rearrangements of complete categories of HS96.²¹ As a result, 1,143 CPC subclasses were created by using over 5,000 headings and subheadings of HS96 as building blocks. The corresponding HS96 codes are shown next to each CPC subclass in the tables presenting the detailed structure of CPC. This information on correspondences between CPC and HS96 categories is included in Part Three of this publication. In view of the important role of HS in the construction of the CPC, general information on the HS is included in chapter IV.C of this Introduction.

38. There are, however, a few exceptions from the rule that each CPC subclass in Sections 0-4 corresponds to one or more HS headings and subheadings. One exception is CPC Subclass 17300 (Steam and hot water) for having no equivalent in the HS. Another exception from the general rule is CPC Group 333 and its classes concerning refined petroleum products. The entire CPC group equals HS heading 2710 which is not further subdivided into subheadings as no practical agreement could be reached and no definitions could be devised to satisfy customs requirements. The CPC, on the other hand, has subdivided this group into eight non-divided classes. These classes are the same as those existing in the SITC Revisions 2 and 3.

Apart from this case, HS96 subheadings are not split between CPC subclasses and each HS96 code corresponds to only one CPC subclass.

39. The relationship between the CPC and the Standard International Trade Classification (SITC) is similar to the one between CPC and HS because SITC Rev.3 also used the HS subheadings as building blocks to create commodity groupings that are more suitable for economic analysis of trade.²² The commodity groupings of SITC reflect (a) the materials used in production, (b) the processing stage, (c) market practices and uses of the products, (d) the

²¹ See note 18.

²² See note 3.

importance of the commodities in terms of the world trade, and (e) technological changes. Regarding the correspondence of SITC Rev.3 with CPC for transportable goods, all five-digit items of SITC Rev.3 are contained wholly within single CPC subclasses in Sections 0-4. As such, CPC subclasses consist of one or more SITC Rev.3 items. Correspondences between CPC and SITC Rev.3 are shown in the tables presenting the detailed structure of CPC included in Part Three of this publication. Since the SITC, like the HS, deals only with transportable goods, no correspondence between CPC and SITC Rev.3, nor between CPC and HS96 exists for CPC categories in the Sections 5 through 9.

C. The Harmonized Commodity Description and Coding System (HS)

40. Since CPC subclasses for transportable goods (Section 0-4) are defined in such a way that each consists of one or more six-digit subheadings of the Harmonized System (HS), it is essential to provide a description of the HS.

41. The HS is an exhaustive nomenclature of internationally traded commodities (goods) classified according to the following criteria: classification according to raw or basic material, classification according to the degree of processing, classification by use or function and classification according to economic activities. These principles were maintained in all subsequent revisions of the nomenclature. The Customs Cooperation Council, which changed its name to World Customs Organization (WCO) in 1994, also agreed, in principle, to introduce the industrial origin criterion in the construction of the HS. However, the principle that each subheading of the HS should contain only goods that are normally produced by a single industry, could not be strictly followed for various reasons. In some cases it was not possible for customs authorities to make a distinction of industrial origin on the basis of the physical properties of a good, or the distinction would lead to categories that were insignificant in international trade. In other cases the historical and legal distinctions inherent in administering customs and trade requirements took precedence over the criterion of industrial origin. In some instances it was not clear where products of a certain industry would fall in the HS. The fact that countries have different economic structures by industries, added to the difficulty of adhering to this principle.

42. The HS evolved from the original customs tariff nomenclature of the Customs Cooperation Council, the 1955 Brussels Tariff Nomenclature (BTN). In 1974 it was renamed the Customs Cooperation Council Nomenclature (CCCN). Efforts to harmonize BTN/CCCN and SITC led to a perfect accord with SITC Rev.2 by 1978. The HS entered into force in 1988, modifying existing four-digit headings of CCCN and introducing subheadings identified by a six-digit code. Plans of the WCO (formerly known as the Customs Cooperation Council) allow for updating the HS every three or four years through meetings of the Review Subcommittee. Statisticians from member states and the United Nations Statistics Division are represented in the work on updating the HS to ensure that the relationship of this nomenclature is maintained with other international classifications. The system contains 21 sections, 97 chapters (although Chapter 77 is reserved for unspecified future use) and 1,241 headings at the four-digit level, 935 of which are further divided into 5,113 subheadings. The latest amendment (HS96) came into effect on 1 January 1996.

43. Besides the commodity nomenclature itself, the Harmonized System contains legal rules of interpretation and the principles agreed to by contracting parties for administering the system.

In addition, the HS provides a very elaborate set of explanatory notes and an alphabetical index to assist its use and interpretation.²³

44. The universal implementation and wide use of the HS is ensured by the International Convention on the Harmonized System, article 3.1(b) of which requires that "each Contracting Party shall make publicly available its import and export trade statistics in conformity with the six-digit codes of the Harmonized System, or, on the initiative of the Contracting Party, beyond that level, to the extent that publication is not precluded for exceptional reasons such as commercial confidentiality or national security".²⁴

D. Relationship to other classifications and standards

45. In addition to ISIC, HS and SITC, there are a number of other classifications and standards interrelated with the CPC, owing to its role as a general-purpose classification of goods and services.

46. The United Nations Classification by Broad Economic Categories (BEC)²⁵ is related to the CPC through its close correlation with SITC. The BEC is designed to serve as a means for converting external trade data compiled by using the SITC into end-use categories that are meaningful within the SNA framework. It is generally possible to rearrange whole CPC subclasses into BEC categories through the correspondence between CPC and SITC Rev.3 and between the SITC and the BEC.

47. Since the CPC provides the product dimension to many of the tables of the System of National Accounts (SNA), the SNA takes the CPC into consideration in the development of the classifications of expenditures by purpose.²⁶ This will be reflected in the forthcoming United Nations publication of the concerned SNA classifications of expenditure according to purpose including: Classification of individual consumption by purpose (COICOP); Classification of the Functions of the Government (COFOG); Classification of the purposes of the non-profit institutions serving households (COPNI) and Classifications of outlays of producers by purpose (COPP). In particular, correspondences between COICOP and CPC have been elaborated. In addition, as noted in the Preface, the CPC will ultimately be revised in the area of public administration, in the light of ongoing revisions to COFOG.

48. Since the beginning of 1988 the European Communities (now the European Union) has been using the Combined Nomenclature (CN) as its international trade classification. CN is an extension of the HS with two extra digits, serving the particular customs and statistical needs of the Member States of the European Union. There is a straightforward relationship between the CPC and the CN, as whole categories of the latter can always be rearranged into CPC

²³ See note 18.

²⁴ International Convention on the Harmonized Commodity Description and Coding System, article 3.1(b), in The Harmonized Commodity Description and Coding System (Brussels, Customs Cooperation Council, 1983).

²⁵ Classification by Broad Economic Categories in terms of SITC, Rev.3, Statistical Papers, Series M, No. 53/Rev.3 (United Nations publication, Sales No. E.89XVII.4).

²⁶ System of National Accounts 1993, Series F, No. 2, Rev. 4, (United Nations publication, Sales No. E.94.XVII.4), Annex 5 Classifications and accounts.

subclasses.

49. Through joint efforts by the United Nations and the European Union for the harmonization of economic classifications, the structure and content of the revised General Industrial Classification of Economic Activities within the European Communities (NACE) and the related product classifications of the European Union were developed in consistency with ISIC and CPC. The Classification of Products by Activity (CPA) is based on NACE and has links to the CPC at the detailed level. PRODCOM²⁷ - the List of industrial products of EUROSTAT can also be linked to the CPC through the HS correspondences of both the PRODCOM nomenclature and the CPC.

50. The United Nations List of Industrial Materials and Products, used in industrial production statistics, is currently being reviewed in light of its relationship to CPC Version 1.0.²⁸

51. In the course of the initial development work on the CPC, with regard to the structure and content of the Provisional CPC categories corresponding to subclasses in Division 53 Constructions, use has been made of the United Nations International Recommendations for Construction Statistics.²⁹ Similarly, in developing the structure and content of the CPC categories in Division 52 Land, use has been made of the Standard Statistical Classification of Land Use,³⁰ a recommendation by the Economic Commission for Europe.

52. The Provisional CPC was utilized as a source by the GATT Secretariat for preparation of the General Agreement on Trade in Services (GATS). Under the GATS agreements, texts with legal standing were drafted and they embodied extensive references to the CPC, referred to by GATS as the GNS/120 list.³¹ In anticipation of the next round of GATS negotiations and continued use of the CPC as a source, a detailed technical review has been conducted by the WTO Secretariat, UNSD and the Central Product Classification Subgroup of the Voorburg Group, in order to provide detailed explanations and interpretations of the changes that have been made to the CPC. This extensive review process has led to a series of editorial corrections, and interpretations of the CPC that are now documented in the United Nations CPC database, and have also been incorporated in the publication of Version 1.0. This collaboration in the area of trade in services is expected to continue during future updating and revisions of CPC.

53. The Statistical Commission at its 29th session, requested that activities be coordinated to maintain consistency between the fifth edition of the IMF Balance of Payment Manual, CPC Version 1.0, SNA 1993 and the manual on trade-in-services statistics proposed by the United

²⁷ PRODCOM List 1997, Eurostat Statistical Document, Theme Energy and Industry Series Methods (4E), ECSC-EC-EAEC, Brussels, Luxembourg 1996

²⁸ Recommendations for the 1973 World Programme of Industrial Statistics, Part II List of Selected Products and Materials, Statistical Papers, Series M, No. 54 (Part II), (United Nations publication, Sales No. E.71.XVII.16).

²⁹ International Recommendations for Construction Statistics, Statistical Papers, Series/M, No./47 (United Nations publication, Sales No. E.68.XVII.11).

³⁰ Standard Statistical Classification of Land Use, Document No. CES/637 (Economic Commission for Europe, Geneva, 1989).

³¹ Multilateral Trade Negotiations, The Uruguay Round, Services Sectoral Classification List (MTN.GNS/W/120), UR-91-0074.

Nations Interagency Task Force on Service Statistics.³² The manual proposed by the Task Force will contain a classification of trade-in-services that is an extension to, and is consistent with, that prescribed for international trade-in-services in the fifth edition of the IMF Balance of Payment Manual (BPM5).³³ Full consideration would be provided to CPC codes as the fundamental building blocks to describe internationally traded service products. The Balance of Payments categories and services are linked to the Provisional Central Product Classification, and a draft correspondence has been prepared between the Balance of Payments services classification and the Central Product Classification Version 1.0.³⁴

V. INTERPRETATION OF THE CPC SYSTEM

A. Rules of interpretation

54. As is often the case with any widely used statistical classification, numerous situations can be expected to arise when it will be unclear which CPC category a particular good or service should be assigned to. When classifying and coding products according to the CPC, the following rules shall apply, depending on whether the considered output of a transaction involves transportable goods (see para. 54) or products, other than transportable goods (see paras. 55-57).

55. The classification of goods in the categories of Sections 0 through 4 shall be determined according to the terms of the corresponding categories in the Harmonized Commodity Description and Coding System (hereinafter referred to as the "Harmonized System"), which is governed by the Rules reproduced below.³⁵

General rules for the interpretation of the Harmonized System

"Classification of goods in the nomenclature shall be governed by the following principles:

- 1. The titles of sections, chapters and sub-chapters are provided for ease of reference only; for legal purposes [of the Harmonized System], classification shall*

³² Background paper: Interagency Task Force Meeting on Service Statistics, Report of the Sixth Meeting - Working Group on International Statistical Programmes and Coordination, Nineteenth Session, New York, 10-13 February 1998, para. 7(ix).

³³ Balance of Payments Manual, Fifth Edition, 1993 (International Monetary Fund, Washington D.C.).

³⁴ Linkages between the CPC Version 1.0 and the OECD-Eurostat Classification of Trade in Services (STD/Serv(97)7) OECD.

³⁵ See note 2.

be determined according to the terms of the headings and any relative section or chapter notes and, provided such headings or notes do not otherwise require, according to the following provisions:

- 2. (a) Any reference in a heading to an article shall be taken to include a reference to that article incomplete or unfinished, provided that the incomplete or unfinished article has the essential character of the complete or finished article. It shall also be taken to include a reference to that article complete or finished but in an unassembled or disassembled state.*
 - (b) Any reference in a heading to a material or substance shall be taken to include a reference to mixtures or combinations of that material or substance with other materials or substances. Any reference to goods of a given material or substance shall be taken to include a reference to goods consisting wholly or partly of such material or substance.*
 - 3. When by application of Rule 2(b) or for any other reason, goods are, prima facie, classifiable under two or more headings, classification shall be effected as follows:*
 - (a) The heading which provides the most specific description shall be preferred to headings providing a more general description. However, when two or more headings each refer to part only of the materials or substances contained in mixed or composite goods or to part only of the items in a set put up for retail sale, those headings are to be regarded as equally specific in relation to those goods, even if one of them gives a more complete or precise description of the goods.*
 - (b) Mixtures, composite goods consisting of different materials or made up of different components, and goods put up in sets for retail sale, which cannot be classified by reference to 3(a), shall be classified as if they consisted of the material or component which gives them their essential character, in so far as this criterion is applicable.*
 - (c) When goods cannot be classified by reference to 3(a), or 3(b), they shall be classified under the heading which occurs last in numerical order among those which equally merit consideration.*
- 4. Goods which cannot be classified in accordance with the above Rules shall be classified under the heading appropriate to the goods to which they are most akin.*
- 5. In addition to the foregoing provisions, the following rules shall apply in respect of the goods referred to therein:*
 - (a) Camera cases, musical instrument cases, gun cases, drawing instrument cases, necklace cases and similar containers, specially shaped or fitted to contain a specific article or set of articles, suitable for long-term use and*

presented with the articles for which they are intended, shall be classified with such articles when of a kind normally sold therewith. The rule does not, however, apply to containers which give the whole its essential character;

- (b) Subject to the provisions of rule 5(a), packing materials and packing containers presented with the goods therein shall be classified with the goods if they are of a kind normally used for packing such goods. However, this provision does not apply when such packing materials or packing containers are clearly suitable for repetitive use.*

- 6. *For legal purposes [of the Harmonized System], the classification of goods in the subheadings of a heading shall be determined according to the terms of those subheadings and any related subheading notes and, mutatis mutandis, to the above Rules, on the understanding that only subheadings at the same level are comparable. For the purposes of the Rule the relative section and chapter notes also apply, unless the context otherwise requires."*

56. The classification of products other than transportable goods, mainly services, shall be determined according to the terms of the categories as described in the divisions, groups, classes or subclasses in the Sections 5 through 9 of the CPC. When services are, prima facie, classifiable under two or more categories, classification shall be effected as follows, on the understanding that only categories at the same level (sections, divisions, groups, classes or subclasses) are comparable:

- (a) The category which provides the most specific description shall be preferred to categories providing a more general description.
- (b) Composite services consisting of a combination of different services which cannot be classified by reference to (a) shall be classified as if they consisted of the service which gives them their essential character, in so far as this criterion is applicable.
- (c) When services cannot be classified by reference to (a) or (b), they shall be classified under the category which occurs last in numerical order among those which equally merit consideration.

57. Services which cannot be classified in accordance with the above rules shall be classified under the category appropriate to the services to which they are most akin.

58. Products comprising a bundle (combination) of goods and services shall be classified according to their main component (value added), in so far as the criterion is applicable.

B. Explanatory notes

59. In addition to the interpretative rules, the explanatory notes of the HS also apply to

Sections 0 through 4 of the CPC as the transportable goods in the CPC are defined in terms of the HS. These notes are well elaborated and their use reduces confusion that might result if new reference material associated with the CPC were drawn up. For reasons of space limitation these explanatory notes are not reproduced in this publication but they are available in the original source.³⁶ The title descriptions of CPC categories in Sections 0-4 are also based on the HS, although they might have been somewhat shortened. Regarding the contents of CPC subclasses in Sections 0-4, the reference to HS96 heading codes and related explanatory notes should provide clear understanding about their coverage.

60. Explanatory notes for CPC categories of Sections 5-9, mainly covering service products, are included in Part Four of this publication. The explanatory notes provide descriptions about services that are included or excluded in each subclass, for reference purposes. In some cases explanatory notes are also available for categories of higher aggregated levels of the CPC structure. Whenever an exclusion is provided, it is accompanied by an exact cross-reference to indicate the code of the subclass where the service in question is actually classified. Although the title description should define the boundary of the subclass, the explanatory notes clarify further the border and content of the class. The explanatory notes are not intended to present an exhaustive list of all the services under each heading, they should only be regarded as lists of illustrative examples of the subclass content.

61. The explanatory notes provided for Sections 5 through 9 of the CPC were developed for statistical purposes. Although these notes intend to provide clarification, as the lists are not exhaustive, users may need further guidance from the United Nations Statistics Division as to the interpretation of the exact content of CPC subclasses. It should be noted that if CPC categories are utilized for purposes other than statistical uses, such as a source for the preparation of legal documents or for such purposes as procurement, those who prepared the legal text that makes reference to CPC categories and not the developers of the classification, are responsible for interpreting their categories in the legal agreements or contracts.

C. Indexes to the classification

62. A newly developed alphabetical index of service products is included in this publication based on the CPC subclasses in Sections 5 through 9. The alphabetical index is currently available in English only and is included in Part Six of all language versions of the publication, for easy reference. It consists of 12,365 items linked to 950 CPC subclass codes. For Sections 0-4, as a reference tool to find the CPC subclasses and codes of transportable goods, one may consult the alphabetical indexes developed by the HS, and/or the Commodity Indexes for SITC Rev. 3.³⁷

Users can then map back to the CPC via the correspondences provided in Part 3 Detailed Structure and Correspondences of CPC Version 1.0

63. To facilitate the use and interpretation of the CPC it is useful to supplement the classification by alphabetical indexes. Such indexes provide a practical tool for finding particular products included in the various CPC categories and also locating goods and services not specifically mentioned in category descriptions. In addition to the search and coding functions,

³⁶ See note 18.

³⁷ Commodity Indexes for the Standard International Trade Classification, Revision 3, Statistical Papers, Series M No. 38/Rev.3, Vol. II (United Nations publication, Sales No. E.94.XVII.10).

alphabetical indexes assist the application of the classification by users and help understanding the structure of the classification.

D. Correspondence between revisions

64. Minor alterations of CPC Version 1.0, such as updating of language, correction of editorial problems and amendments of explanatory notes through interpretation and rulings, will take place as needed and be widely disseminated. Major revisions are not expected to occur more frequently than every five years.

65. Changes that have been made in the CPC are reflected in the correspondence tables between the Provisional CPC and CPC Version 1.0 and vice versa; however, further detailed explanations may be required in certain circumstances. The extent of changes between CPC revisions indicates full or partial correspondence to one or several categories of the previous version. Codes of partially corresponding categories are marked with an asterisk. It should be noted that changes in the wording of explanatory notes or title descriptions may be due to clarifications only, without any implications on the content of the category. Sometimes changes in codes are simply technical consequences of the overall change in the structure of the classification owing to related recoding of categories. Therefore, it is advisable to check the correspondence tables, available in Part Five of this publication, for verification and confirmation of actual changes. Interpretations and rulings on classification problems, including application issues related to its implementation, may be requested from UNSD (see para. 33 on Support to users of CPC).

CPC VERSION 1.0: BROAD STRUCTURE

Division code		Groups	Classes	Sub-classes
0	AGRICULTURE, FORESTRY AND FISHERY PRODUCTS	17	66	88
01	Products of agriculture, horticulture and market gardening	9	37	44
02	Live animals and animal products	2	11	21
03	Forestry and logging products	3	10	10
04	Fish and other fishing products	3	8	8
1	ORES AND MINERALS; ELECTRICITY, GAS AND WATER	18	34	34
11	Coal and lignite; peat	1	4	4
12	Crude petroleum and natural gas	1	3	3
13	Uranium and thorium ores	1	1	1
14	Metal ores	2	6	6
15	Stone, sand and clay	4	8	8
16	Other minerals	3	8	8
17	Electricity, town gas, steam and hot water	3	3	3
18	Water	1	1	1
2	FOOD PRODUCTS, BEVERAGES AND TOBACCO; TEXTILES, APPAREL AND LEATHER PRODUCTS	44	186	240
21	Meat, fish, fruit, vegetables, oils and fats	8	34	47
22	Dairy products	2	11	11
23	Grain mill products, starches and starch products; other food products	8	31	40
24	Beverages	4	9	11

CPC VERSION 1.0: BROAD STRUCTURE

Division code		Groups	Classes	Sub- classes
25	Tobacco products	1	2	2
26	Yarn and thread; woven and tufted textile fabrics	8	53	53
27	Textile articles other than apparel	4	18	29
28	Knitted or crocheted fabrics; wearing apparel	3	11	30
29	Leather and leather products; footwear	6	17	17
3	OTHER TRANSPORTABLE GOODS, EXCEPT METAL PRODUCTS, MACHINERY AND EQUIPMENT	58	246	330
31	Products of wood, cork, straw and plaiting materials	8	16	21
32	Pulp, paper and paper products; printed matter and related articles	7	23	45
33	Coke oven products; refined petroleum products; nuclear fuel	7	19	19
34	Basic chemicals	8	37	44
35	Other chemical products; man-made fibres	5	28	33
36	Rubber and plastics products	5	24	28
37	Glass and glass products and other non-metallic products n.e.c.	7	34	50
38	Furniture; other transportable goods n.e.c.	8	41	58
39	Wastes or scraps	3	24	32
4	METAL PRODUCTS, MACHINERY AND EQUIPMENT	50	210	456
41	Basic metals	6	23	86
42	Fabricated metal products, except machinery and equipment	4	15	36
43	General purpose machinery	6	28	60

CPC VERSION 1.0: BROAD STRUCTURE

Division code		Groups	Classes	Sub- classes
44	Special purpose machinery	9	39	97
45	Office, accounting and computing machinery	2	17	17
46	Electrical machinery and apparatus	6	24	34
47	Radio, television and communication equipment and apparatus	6	16	26
48	Medical appliances, precision and optical instruments, watches and clocks	4	26	52
49	Transport equipment	7	22	48
5	INTANGIBLE ASSETS; LAND; CONSTRUCTIONS; CONSTRUCTION SERVICES	16	57	86
51	Intangible assets	2	5	5
52	Land	4	4	4
53	Constructions	2	10	24
54	Construction services	8	38	53
6	DISTRIBUTIVE TRADE SERVICES; LODGING; FOOD AND BEVERAGE SERVING SERVICES; TRANSPORT SERVICES; AND UTILITIES DISTRIBUTION SERVICES	31	122	478
61	Wholesale trade services	2	18	118
62	Retail trade services	5	45	265
63	Lodging; food and beverage serving services	3	7	12
64	Land transport services	3	10	29
65	Water transport services	2	8	15
66	Air transport services	4	6	6
67	Supporting and auxiliary transport services	9	22	24
68	Postal and courier services	1	2	5

CPC VERSION 1.0: BROAD STRUCTURE

Division code		Groups	Classes	Sub- classes
69	Electricity distribution services; gas and water distribution services through mains	2	4	4
7	FINANCIAL AND RELATED SERVICES; REAL ESTATE SERVICES; AND RENTAL AND LEASING SERVICES	9	33	66
71	Financial intermediation, insurance and auxiliary services	3	17	35
72	Real estate services	2	6	10
73	Leasing or rental services without operator	4	10	21
8	BUSINESS AND PRODUCTION SERVICES	31	124	199
81	Research and development services	4	12	12
82	Professional, scientific and technical services	2	10	15
83	Other professional, scientific and technical services	2	31	70
84	Telecommunications services; information retrieval and supply services	6	9	9
85	Support services	3	21	26
86	Production services, on a fee or contract basis	7	31	50
87	Maintenance and repair services	7	10	17
9	COMMUNITY, SOCIAL AND PERSONAL SERVICES	22	84	121
91	Public administration and other services to the community as a whole; compulsory social security services	3	17	32
92	Education services	5	8	8
93	Health and social services	3	8	18
94	Sewage and refuse disposal, sanitation and other environmental protection services	1	7	9

CPC VERSION 1.0: BROAD STRUCTURE

Division code		Groups	Classes	Sub- classes
95	Services of membership organizations	3	6	9
96	Recreational, cultural and sporting services	4	23	30
97	Other services	1	13	13
98	Domestic services	1	1	1
99	Services provided by extraterritorial organizations and bodies	1	1	1

Totals	Sections	Divisions	Groups	Classes	Sub- classes
Transportable goods (sects. 0-4)	5	39	185	742	1 143
Manufactured products (sects. 2-4)	3	27	152	640	1 026
Non-transportable goods and services (sects. 5-9)	5	32	109	420	950
Overall total	10	71	294	1 162	2 093